



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,192	10/12/2005	Francisco Javier Romero Amaya	38184.04113	1285

38647

7590

04/20/2010

MILBANK, TWEED, HADLEY & MCCLOY LLP
INTERNATIONAL SQUARE BUILDING
1850 K STREET, N.W., SUITE 1100
WASHINGTON, DC 20006

EXAMINER

SCHLENTZ, NATHAN W

ART UNIT

PAPER NUMBER

1616

MAIL DATE

DELIVERY MODE

04/20/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/537,192

Applicant(s)ROMERO AMAYA, FRANCISCO
JAVIER**Examiner**

Nathan W. Schlientz

Art Unit

1616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,8,10,11,14,15 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,8,10,11,14,15 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of Claims

Claims 1, 3-5, 7, 8, 10, 11, 14, 15 and 20-23 are pending and thus examined herein on the merits for patentability. No claim is allowed at this time.

Response to Arguments

Applicant's Remarks filed 08 January 2010 have been fully considered and are discussed herein below.

Withdrawn Rejections

Rejections and/or objections not reiterated from the previous Office Action are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set of rejections and/or objections presently being applied to the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1,148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
1. Claims 1, 10, 11, 14 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodama et al. (US 5,747,519) in view of Creffield et al. (The International Research Group on Wood Preservation, 12-17 May 2002).

Determination of the scope and content of the prior art

(MPEP 2141.01)

Kodama et al. teach a composition comprising a compound of formula (I) and a pyrethroid compound, such as bifenthrin, wherein the composition may be applied to (i.e., superficial treatment) or adsorbed in (i.e., impregnating) building materials (col. 1, ln. 32-42; col. 2, ln. 6-10 and 38-40; col. 3, ln. 21-24, 27-45; and claim 11). Kodama et al. further teach that the composition may be formulated into forms suited to the object of use, such as an oil solution, emulsion, water solution, powder, granules, wettable powder, aerosol, etc. (col. 3, ln. 37-45); as well as the use of auxiliary agents and liquid vehicles, such as organic solvents (col. 3, l. 46 to col. 4, l. 9). Kodama et al. also teach examples of compositions comprising bifenthrin for the treatment of wood, such as timber products like plywood, particle boards and half boards (col. 4, ln. 13-20; Embodiments 1 and 2 in Examples; and Table 1).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Kodama et al. do not explicitly teach the rate at which bifenthrin is applied for wood treatment. However, Creffield et al. teach treating *P. radiata* sapwood specimens to a nominal retention of 2.5, 5, 10, 15, 20, 30 and 50 g/m³ of bifenthrin, wherein protection of the *P. radiata* against attack from *Mastotermes darwiniensis* and *Coptotermes acinaciformis* was determined (page 3, Laboratory bioassay, Field Trial; and Tables 1 and 2). Creffield et al. teach that the lower and upper threshold limits obtained for *M. darwiniensis* in both the laboratory and field were 10 and 20 g/m³; and the threshold limit for *C. acinaciformis* must be less than 2.5 g/m³ in the laboratory and less than 5 g/m³ in the field (Table 3; page 7, Conclusions).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time of the invention to apply the bifenthrin containing composition to wood products, according to Kodama et al., wherein the bifenthrin is applied at a retention rate of 2.5-20 g/m³ in order to protect the wood product against *Coptotermes acinaciformis* and *Mastotermes darwiniensis*, as reasonably taught by Creffield et al.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to

one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicants argue on pages 5-6 that Creffield discloses a bifenthrin formulation wherein white spirit is used as the solvent, not water. The penetration characteristics of organic solvents into wood compared to the penetration characteristics of water into wood are completely different. Thus, applicants argue that combining Kodama with Creffield does not yield the claimed invention because the retention rates required by the claims are in the context of bifenthrin diluted in water.

However, the examiner respectfully argues that Creffield et al. was cited for concentration of bifenthrin necessary for protection of the *P. radiata* against attack from *Mastotermes darwiniensis* and *Coptotermes acinaciformis*. Kodama et al. teach aqueous compositions comprising bifenthrin and water for termite control. Kodama et al. do not explicitly recite the concentration of bifenthrin necessary in wood, such as timber, plywood, furniture, particle boards, half boards and all kinds of wood, to protect against termites, but merely states that the aqueous compositions of their invention could be used for treating these woods. Therefore, Creffield et al. was cited to determine what concentration of bifenthrin would be necessary for adequate control of termites. The examiner is not relying on Creffield et al. for the type of solvent or carrier desired for application of bifenthrin to wood, but merely the desired final concentration for control of termites. Therefore, one of ordinary skill in the art would be motivated to apply the composition of Kodama et al., which comprises bifenthrin in water, to wood at

a final concentration of 2.5-20 g/m³ in order to protect the wood product against *Coptotermes acinaciformis* and *Mastotermes darwiniensis*, as reasonably taught by Creffield et al.

2. Claims 1, 10, 11, 14 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wimmer et al. (CA 2 321 353) in view of Creffield et al. (The International Research Group on Wood Preservation, 12-17 May 2002).

Determination of the scope and content of the prior art

(MPEP 2141.01)

Wimmer et al. teach an aqueous wood preservative formulation comprising a cyclodextrin, tebuconazole, propiconazole and **bifenthrin** (page 4, 2nd and 3rd paragraphs; page 14, Example 7; page 15, Example 8; and claims 10 and 11). Wimmer et al. further teach a method of protecting wood and timber materials by treating said wood or timber with the preservative composition comprising bifenthrin (claim 18). Also, Wimmer et al. teach that the wood preservative may also comprise colorants (page 6, line 21; and claim 15), and may be applied to wood by known means, such as painting on, spraying or impregnating methods such as dipping, immersing, and the pressure, vacuum and double-vacuum methods (page 9, 3rd paragraph).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Wimmer et al. do not explicitly teach the rate at which bifenthrin is applied for wood treatment. However, Creffield et al. teach treating *P. radiata* sapwood specimens

to a nominal retention of 2.5, 5, 10, 15, 20, 30 and 50 g/m³ of bifenthrin, wherein protection of the *P. radiata* against attack from *Mastotermes darwiniensis* and *Coptotermes acinaciformis* was determined (page 3, Laboratory bioassay, Field Trial; and Tables 1 and 2). Creffield et al. teach that the lower and upper threshold limits obtained for *M. darwiniensis* in both the laboratory and field were 10 and 20 g/m³; and the threshold limit for *C. acinaciformis* must be less than 2.5 g/m³ in the laboratory and less than 5 g/m³ in the field (Table 3; page 7, Conclusions).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time of the invention to apply the aqueous composition comprising bifenthrin to wood products according to Wimmer et al. wherein the bifenthrin is applied at a retention rate of 2.5-20 g/m³ in order to protect the wood product against *Coptotermes acinaciformis* and *Mastotermes darwiniensis*, as reasonably taught by Creffield et al.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments on pages 6-7 are the same as above for the rejection over Kodama et al. in view of Creffield et al. Therefore, the examiner's response above is incorporated herein by reference.

3. Claims 1, 10, 11, 14 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahide et al. (JP 11-207706; machine-generated translation referred to herein and attached herein), in view of Wimmer et al. (CA 2 321 353) and Creffield et al. (The International Research Group on Wood Preservation, 12-17 May 2002).

Determination of the scope and content of the prior art

(MPEP 2141.01)

Takahide et al. teach an antiseptic insecticide for wood comprising a wood antiseptic and insecticide, such as bifenthrin, diluted with water (Abstract, Work Example 3 [0046]).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Takahide et al. do not explicitly teach the aqueous bifenthrin composition being applied to the wood by spraying at a retention rate between about 4 and 23 g of bifenthrin per cubic meter of wood, as instantly claimed. However, Wimmer et al. teach that known methods for applying bifenthrin to wood products include painting on, spraying or impregnating methods such as dipping, immersing, and the pressure, vacuum and double-vacuum methods (page 9, 3rd paragraph). Also, Creffield et al.

teach treating *P. radiata* sapwood specimens to a nominal retention of 2.5, 5, 10, 15, 20, 30 and 50 g/m³ of bifenthrin, wherein protection of the *P. radiata* against attack from *Mastotermes darwiniensis* and *Coptotermes acinaciformis* was determined (page 3, Laboratory bioassay, Field Trial; and Tables 1 and 2). Creffield et al. teach that the lower and upper threshold limits obtained for *M. darwiniensis* in both the laboratory and field were 10 and 20 g/m³; and the threshold limit for *C. acinaciformis* must be less than 2.5 g/m³ in the laboratory and less than 5 g/m³ in the field (Table 3; page 7, Conclusions).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time of the invention to apply the aqueous bifenthrin compositions according to Takahide et al. to wood by spraying at a retention rate of 2.5-20 g/m³ in order to protect the wood product (i.e. *P. radiata*) against *Coptotermes acinaciformis* and *Mastotermes darwiniensis*, as reasonably taught by Creffield et al.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments on pages 7-8 are the same as above for the rejection over Kodama et al. in view of Creffield et al. Therefore, the examiner's response above is incorporated herein by reference.

4. Claims 1, 7, 10, 11, 14, 15, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shires et al. (The International Research Group on Wood Preservation, 19-24 May 1996) in view of Wimmer et al. (CA 2 321 353).

Determination of the scope and content of the prior art

(MPEP 2141.01)

Shires et al. teach bifenthrin as a suitable wood preservative (Title). Shires et al. teach treating Scots pine sapwood (*Pinus sylvestris* L.) and beech wood (*Fagus sylvatica* L.) with a micro emulsion (ME) concentrate containing bifenthrin in a 4% water solution by dipping which gives a loading of 6.4 to 9.7 g/m³ bifenthrin at a depth of 3 mm (Section 3.1, "Dipping"). Shires et al. further teach spraying wood with a light organic solvent composition comprising bifenthrin as well as double vacuuming into wood a water diluted composition comprising bifenthrin (Section 2.1, 2.2, and 3.1).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Shires et al. do not explicitly teach the water diluted bifenthrin composition being applied to the wood by spraying at a retention rate between about 4 and 23 g of bifenthrin per cubic meter of wood, as instantly claimed. However, they teach spraying, dipping and double vacuuming as suitable methods for applying bifenthrin compositions

to wood. Also, Wimmer et al. teach that known methods for applying bifenthrin to wood products include painting on, spraying or impregnating methods such as dipping, immersing, and the pressure, vacuum and double-vacuum methods (page 9, 3rd paragraph).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time of the invention to apply the water diluted bifenthrin composition according to Shires et al. by spraying at a retention rate of between 4 and 23 g per cubic meter because Wimmer et al. teach applying aqueous compositions of bifenthrin by known methods, such as spraying, and Shires et al. teach aqueous compositions of bifenthrin at a retention rate of 6.4 to 9.7 g/m³.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicants argue on page 8 that Shires does not teach the water diluted bifenthrin composition being applied by spraying at a retention rate between about 4 and 23 grams per cubic meter of wood as instantly claimed and Wimmer does not cure this deficiency because no retention rates are disclosed.

However, the examiner respectfully argues that Shires et al. already teach the desired amount of bifenthrin retained in the wood: a loading of 6.4 to 9.7 g/m³ bifenthrin at a depth of 3 mm when dipping or a loading of 3.5 to 14.5 g/m³ bifenthrin at a depth of 3 mm when superficially treating (Section 3.1). Wimmer et al. was merely relied upon for the teaching that known methods for applying aqueous bifenthrin preservative compositions to wood products include spraying. Therefore, one of ordinary skill in the art would be reasonably motivated to spray the aqueous bifenthrin-containing compositions of Shires et al. onto wood in order to preserve the wood products. One of ordinary skill in the art would want to achieve the final concentration of bifenthrin in wood that is effective to preserve the wood, and Shires et al. teaches applying bifenthrin to wood to obtain a loading of 6.4 to 9.7 g/m³ bifenthrin at a depth of 3 mm when dipping or a loading of 3.5 to 14.5 g/m³ bifenthrin at a depth of 3 mm when superficially treating. Thus, one of ordinary skill in the art would spray bifenthrin onto the wood in order to achieve a loading of 6.4 to 9.7 g/m³ bifenthrin at a depth of 3 mm or a loading of 3.5 to 14.5 g/m³ bifenthrin at a depth of 3 mm.

5. Claims 1, 10, 11, 14 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaetsch et al. (EP 1 018 413) in view of Wimmer et al. (CA 2 321 353) and Creffield et al. (The International Research Group on Wood Preservation, 12-17 May 2002).

Determination of the scope and content of the prior art

(MPEP 2141.01)

Jaetsch et al. teach insecticidal treatment of the backside of plywood with bifenthrin, nonylphenol, formalinchatcher, water, and other solvents (page 7). Therefore, Jaetsch et al. teach a method of treating timber with bifenthrin in water as well as the timber product comprising bifenthrin.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Jaetsch et al. do not explicitly teach the aqueous bifenthrin composition being applied to the wood by spraying at a retention rate between about 4 and 23 g of bifenthrin per cubic meter of wood, as instantly claimed. However, Wimmer et al. teach that known methods for applying bifenthrin to wood products include painting on, spraying or impregnating methods such as dipping, immersing, and the pressure, vacuum and double-vacuum methods (page 9, 3rd paragraph). Also, Creffield et al. teach treating *P. radiata* sapwood specimens to a nominal retention of 2.5, 5, 10, 15, 20, 30 and 50 g/m³ of bifenthrin, wherein protection of the *P. radiata* against attack from *Mastotermes darwiniensis* and *Coptotermes acinaciformis* was determined (page 3, Laboratory bioassay, Field Trial; and Tables 1 and 2). Creffield et al. teach that the lower and upper threshold limits obtained for *M. darwiniensis* in both the laboratory and field were 10 and 20 g/m³; and the threshold limit for *C. acinaciformis* must be less than 2.5 g/m³ in the laboratory and less than 5 g/m³ in the field (Table 3; page 7, Conclusions).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time of the invention to apply the aqueous composition comprising bifenthrin to the backside of plywood according to Jaetsch et al. wherein the bifenthrin is applied by spraying at a rate of 2.5-20 g/m³, as reasonably taught by Wimmer et al. and Creffield et al.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments on page 9 are the same as above for the rejection over Kodama et al. in view of Creffield et al. Therefore, the examiner's response above is incorporated herein by reference.

6. Claims 1, 10, 11, 14 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (US 5,536,305) in view of Creffield et al. (The International Research Group on Wood Preservation, 12-17 May 2002).

Determination of the scope and content of the prior art

(MPEP 2141.01)

Yu teaches applying bifenthrin to freshly sawn timber via pressure treatment, vacuum treatment, dipping, brushing, spraying, or soaking (col. 2, ln. 4-7 and 13; col. 4,

ln. 26-34; and claims 1-5). Yu further teaches that surfactants, adjuvants including antifoam agents, antifreeze agents, wetting agents, thickeners, and the like can be added to composition, as well as organic solvents (col. 2, ln. 17-18, 34-35, and 52-59; and claims 2 and 3). Yu also teaches that the composition is suitable for dilution with water to form a microemulsion or an emulsion, wherein the microemulsion or emulsion is applied to the wood (i.e., lumber, timber, posts, wood coverings, wicker, millwork, joinery, plywood, fiberboard, chipboard, waferboard, particleboard, etc) (col. 1, ln. 13-17; col. 2, ln. 36-39; Table 1; and claim 5).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Yu does not explicitly teach the rate at which bifenthrin is applied for wood treatment. However, Creffield et al. teach treating *P. radiata* sapwood specimens to a nominal retention of 2.5, 5, 10, 15, 20, 30 and 50 g/m³ of bifenthrin, wherein protection of the *P. radiata* against attack from *Mastotermes darwiniensis* and *Coptotermes acinaciformis* was determined (page 3, Laboratory bioassay, Field Trial; and Tables 1 and 2). Creffield et al. teach that the lower and upper threshold limits obtained for *M. darwiniensis* in both the laboratory and field were 10 and 20 g/m³; and the threshold limit for *C. acinaciformis* must be less than 2.5 g/m³ in the laboratory and less than 5 g/m³ in the field (Table 3; page 7, Conclusions).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one of ordinary skill in the art at the time of the invention to apply the bifenthrin containing composition to wood products according to Yu wherein the bifenthrin is applied at a retention rate of 2.5-20 g/m³ in order to protect the wood product against *Coptotermes acinaciformis* and *Mastotermes darwiniensis*, as reasonably taught by Creffield et al.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments on page 10 are the same as above for the rejection over Kodama et al. in view of Creffield et al. Therefore, the examiner's response above is incorporated herein by reference.

7. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kodama et al. in view of Creffield et al.; Wimmer et al. in view of Creffield et al.; Shires et al. in view of Wimmer et al.; and Yu in view of Creffield et al.; as discussed above, and further in view of Heitmanek (US 4,894,262).

Determination of the scope and content of the prior art
(MPEP 2141.01)

The teachings of Kodama et al., Wimmer et al., Shires et al., Yu, and Creffield et al. are discussed above and incorporated herein by reference.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Kodama et al., Wimmer et al., Shires et al., and Yu do not teach spraying the timber with bifenthrin at a sawmill with a linear sprayer after stress grading and a second spray with a transverse sprayer after a docker saw operation. However, it is commonly known in the art that the use of stress-graded timber is for structural use, it is a critical safety element of construction and the use of strength-graded timber is required by Building Regulations. Also, Heitmanek teaches treating lumber by spraying at the sawmill to seal the sides and ends to maintain the moisture content of the wood (col. 1, ln. 10-55).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one skilled in the art at the time of the invention to apply the bifenthrin composition to the timber product of Kodama et al., Wimmer et al., Shires et al., and Yu while the timber product is at the sawmill and has been stress graded and freshly cut by a docker saw in order to seal/protect the sides and the ends, as reasonably taught by Heitmanek. Also, one of ordinary skill in the art would want to apply the bifenthrin preservative after cutting with a docker as opposed to prior to cutting with the docker saw in order to prevent exposing unprotected portions of the timber.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments on page 11 are the same as above. Therefore, the examiner's response above is incorporated herein by reference.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kodama et al. in view of Creffield et al.; Wimmer et al. in view of Creffield et al.; Takahide et al. in view of Wimmer et al. and Creffield et al.; Shires et al. in view of Wimmer et al.; Jaetsch et al. in view of Wimmer et al. and Creffield et al.; and Yu in view of Creffield et al.; as discussed above, and further in view of Richardson (Wood Preservation, 1993).

Determination of the scope and content of the prior art

(MPEP 2141.01)

The teachings of Kodama et al., Wimmer et al., Takahide et al., Shires et al., Jaetsch et al., Yu and Creffield et al. are discussed above and incorporated herein by reference.

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

Kodama et al., Wimmer et al., Takahide et al., Shires et al., Jaetsch et al., Yu and Creffield et al. do not teach treating timber with bifenthrin while the wood is warmer than room temperature, as instantly claimed. However, it is very common to treat wood with preservatives wherein the wood is at elevated temperatures, as evidenced by Richardson (pg. 67, Treatment Temperature).

Finding of *prima facie* obviousness

Rational and Motivation (MPEP 2142-43)

Therefore, it would have been *prima facie* obvious for one skilled in the art at the time of the invention to treat the timber product of Kodama et al., Wimmer et al., Takahide et al., Shires et al., Jaetsch et al., Yu and Creffield et al. with bifenthrin while the wood was warmer than room temperature, as reasonably taught by Richardson.

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to Arguments

Applicant's arguments on pages 11-12 are the same as above. Therefore, the examiner's response above is incorporated herein by reference.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan W. Schlientz whose telephone number is (571)272-9924. The examiner can normally be reached on 9:00 AM to 5:30 PM, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann R. Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NWS

/John Pak/
Primary Examiner, Art Unit 1616